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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,047	10/12/2001	Steve J. Shields	DP-304607	3706

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EXAMINER
ADDISON, KAREN B

ART UNIT	PAPER NUMBER
2834	

DATE MAILED: 02/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/977,047	SHIELDS ET AL.	
	Examiner	Art Unit	
	Karen B Addison	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 November 2002* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-8, is rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson (5210453) in view of Koppel (5433570).

Nelson discloses an electrical ac generator in fig.3 having a housing (16) including a drive-end portion (12) and a mounting-end portion (20), and a stator (22) mountable for rotation within the housing. Wherein, one of the end portions including a plurality of circumferentially spaced ears (17,46) having first apertures (A) therein and the other of said end portions including a corresponding plurality of circumferentially spaced ears (13) having threaded apertures received in one of said threaded apertures to bolt the housing ends together against the stator with a through-bolt (18) comprising a head portion (44), a elongated shank portion (c) and a threaded portion (42) extending from the elongated shank portion whereby the through bolt is subject to bending stress.. Nelson does not disclose, the shank portion being neck down adjacent said threaded portion to a diameter sufficiently less than a minor diameter of threads in said threaded portion.

Koppel discloses a screw in fig.1 having an elongated shank (8), a head portion (3) and two neck down portion (10) adjacent to the threaded portion of the shank. Wherein the diameter is sufficiently less than a minor diameter of the threads in the threaded portion of the shank for the withstanding forces acting on the head of the screw (making it fatigue resistant). Therefore it would have been obvious to one having ordinary skill at the time the invention was made to modify the ac generator of Nelson with the screw of Koppel for the purpose eliminating bending load and thereby Improving fatigue characteristics.

Referring to claims 4 and 8. No patentable weight has been given to the method of manufacturing limitations (i. e. rolled) since "even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe,* 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)

Response to Arguments

In regards to the Applicant's argument that Nelson's patent concentrates on avoiding noise caused by the vibration of the bolt head along the face of the ears they engage and therefore does not suggest the through bolt is subject to bending stress, which have been identified by applicants in the present application.

However, the fact the applicant uses an identical alternator having substantially the same structure of Nelson for a different purpose does not alter the conclusion that it's use in a prior art device would be prima facie obvious from the purpose disclosed in the reference." In re Lintner, 173 USPQ 560.

Also, the bolt in Nelson reference is subject to bending stress because the alternator housing contains a pair of space apart cantilevered ear (17,46) in which a through-bolt extends through the ears (17,46); to solidly clamp the housing together. Therefore, the bolt (18) is subject to bending stress due to the absence of the solid stack between the ears.

In regards to the applicant's argument that Koppel teaches that the neck down portion of the shank should not have a diameter less than a minor diameter of threads is noted. However, Koppel clearly shows in fig.1 (col.3 line 17-30) that the screw has a diameter less (14) than a minor diameter of threads (7) and only the base of the groves (b) should have the same diameter of the threaded portion (A).

In regards to the Applicant's argument that Koppel teaches that the groove or grooves must be made by material removal rather that by rolling because the rolled region would be too strong to relieve the bending load is noted.

However, no patentable weight has been given to the method of manufacturing limitations (i. e. rolling) since "even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe,* 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)

In regards to the applicant's argument that Koppel discloses a screw in which there is a problem with bending but no indication of the problem resulting in fatigue failure. However, the fact that the applicant uses a bolt having substantially the same structure of Koppel for a different purpose does not alter the conclusion that it's use in a prior art device would be prima facie obvious from the purpose disclosed in the reference." In re Lintner, 173 USPQ560.

Koppel discloses a bolt with similar characteristic of that of Nelson with the exception of the bolt having a neck down bottle portions for the purpose of purpose of absorbing bending loads and making it fatigue resistance.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in

the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen B Addison whose telephone number is 703-306-5855. The examiner can normally be reached on 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 703-308-1317. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3431 for regular communications and 703-305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

KBA
February 6, 2003

JOSEPH WAKS
PRIMARY EXAMINER